

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

DYAMONE WHITE,
et al.,

Plaintiffs,

vs.

STATE BOARD OF ELECTION
COMMISSIONERS,
et al.,

Defendants.

No. 4:22cv62-MPM-JMV

DECLARATION OF WILLIAM S. COOPER

WILLIAM S. COOPER, acting in accordance with 28 U.S.C. § 1746, Federal Rule of Civil Procedure 26(a) (2) (B), and Federal Rules of Evidence 702 and 703, does hereby declare and say:

I. INTRODUCTION

A. Redistricting Experience

1. My name is William S. Cooper. I have a B.A. in Economics from Davidson College. As a private consultant, I was retained as a demographic and redistricting expert for the Plaintiffs. I am compensated at a rate of \$150 per hour, and my compensation is not contingent on the outcome of this litigation. I reserve the right to continue to amend or supplement my reports, including in light of

additional facts, testimony, and/or materials that may come to light over the course of the discovery period in this case.

2. I have been accepted as an expert trial witness on redistricting and demographics in about 50 federal-court voting rights cases across 18 states, including Mississippi. Five of those cases resulted in changes to statewide legislative boundaries.¹ Approximately 25 of those cases led to changes in local election district plans.² My testimony in such cases almost always includes a review of the demographics and socioeconomic characteristics of the jurisdiction or jurisdictions at issue. In Voting Rights Act cases, I also typically produce one or more illustrative districting plans for the jurisdiction.

3. In 2022, I have testified as an expert in redistricting and demographics in six cases challenging district boundaries under Section 2 of the Voting Rights Act: *Caster v. Merrill*, No. 21-1356-AMM (N.D. Ala.), *Pendergrass v. Raffensperger*, No. 21-05337-SCJ (N.D. Ga.), *Alpha Phi Alpha Fraternity v. Raffensperger*, No. 21-05339-SCJ (N.D. Ga.), *NAACP v Baltimore County*, No. 21-cv-03232-LKG

¹ The five are *Rural West Tennessee African-American Affairs Council, Inc. v. McWherter*, No. 92-cv-2407 (W.D. Tenn.); *Old Person v. Brown*, No. 96-cv-0004 (D. Mont.); *Bone Shirt v. Hazeltine*, No. 01-cv-3032 (D.S.D.); *Alabama Legislative Black Caucus v. Alabama*, No. 12-cv-691 (M.D. Ala.); and *Thomas v. Reeves*, No. 18-cv-441 (S.D. Miss.). In *Bone Shirt*, the court also adopted the remedial plan I developed.

² I have also served as an expert witness on demographics in trials relating to issues other than voting and redistricting. For example, I served as an expert in *Stout v. Jefferson County Board of Education*, No. 2:65-cv-00396-MHH (N.D. Ala.), a school desegregation case involving the City of Gardendale, Alabama.

(Md.), *Christian Ministerial Alliance v. Hutchinson* No. 4:19-cv-402-JM (E.D. Ar.), and *Robinson v. Ardoin*, No. 3:22-cv-00211-SDD-SDJ (M.D. La.). I also testified at trial this year as an expert on demographics in *NAACP v. Lee*, No. 4:21cv187-MW/MAF (N.D. Fla.), a case involving recent changes to Florida election law.

4. With respect to my work in Mississippi, I served as an expert witness in redistricting and demographics in *Thomas v. Reeves*, No. 18-cv-441 (S.D. Miss.), a Voting Rights Act case which resulted in the revision of Mississippi State Senate District lines in the Mississippi Delta. In addition to the *Thomas* case, I have testified at trial in two other state-level voting lawsuits in Mississippi: *NAACP v. Fordice* in 1999, which involved the districts used for the Public Service Commission and Transportation Commission, and *Smith v. Clark* in 2002, which involved congressional redistricting in Mississippi.

5. I have also testified at trial over the past three decades as a redistricting and demographics expert in several local-level voting cases in Mississippi—in the 1990s³, 2000s⁴, and 2010s⁵.

³ See, e.g., *Addy v. Newton County*, No. 4:95cv39 (S.D. Miss.); *Gunn v. Chickasaw County*, No. 87cv165 (N.D. Miss.).

⁴ See, e.g., *Fairley v. Hattiesburg*, No. 2:06cv167-KS-MTP (S.D. Miss.); *Boddie v. Cleveland School District*, No. 4:07cv63-M-B (N.D. Miss.).

⁵ *Fairley v. City of Hattiesburg*, No. 2:13cv18-KS-MTP (S.D. Miss.).

6. I have also developed election plans that were adopted by the following local governing bodies in Mississippi: in the 1990s—Webster County; in the 2000s—Bolivar County and Webster County; and in the 2010s—Bolivar County, Claiborne County, and the City of Grenada. I currently serve as a post-2020 redistricting consultant to the Bolivar County Board of Supervisors, Washington County Board of Supervisors, and the City of Grenada Council.

7. For additional historical information on my testimony as an expert witness and experience preparing and assessing proposed redistricting maps for Section 2 litigation, see a summary of my redistricting work attached as **Exhibit A**. A listing of Mississippi voting cases where I have filed declarations but did not testify at trial is also available in **Exhibit A**. Six of the lawsuits where I filed declarations resulted in changes to local redistricting plans.

B. Purpose of Report

8. The attorneys for the Plaintiffs in this case have asked me to determine whether the Black population in Mississippi is “sufficiently large and geographically compact”⁶ to allow for one of the three at-large districts for the

⁶ *Thornburg v. Gingles*, 478 U.S. 30, 50 (1986).

Mississippi Supreme Court to be drawn with a majority Black voting age population (“BVAP”), consistent with traditional districting principles.

9. The attorneys also asked me to review historical and current demographics (reported in the decennial Census published by the U.S. Census Bureau), as well as socioeconomic characteristics reported in the annual releases of the *American Community Survey* (“ACS”) for African Americans and non-Hispanic Whites.⁷

10. **Exhibit B** describes the sources and methodology I have employed in the preparation of this report and the illustrative plans described below.

C. Summary of Expert Conclusions

11. I have reached the following conclusions:

- Based on the 2020 Census, Black Mississippians are sufficiently numerous and geographically compact to allow for one majority-Black VAP district as part of a three-district plan for the Mississippi Supreme Court. A number of illustrative plans can be drawn that are consistent with traditional districting principles and that do not split a single county.

⁷ In this report, “Black” and “African American” are synonymous, as are “Latino” and “Hispanic,” and “White” and “non-Hispanic White.” Unless otherwise noted, beginning with the 2000 Census, “Black” refers to persons of all ages who are any part Black (“AP Black”), i.e., single-race Black or more than one race and some part Black. Prior to the 2000 Census, the AP Black count cannot be derived from the PL-94-171 file used for redistricting. The “AP Black” classification includes all persons who self-identified in the Census as single-race Black or some part Black, including Hispanic Black. It is my understanding that following the U.S. Supreme Court decision in *Georgia v. Ashcroft*, 539 U.S. 461 (2003), the “Any Part” definition is the appropriate Census classification to use in most Section 2 cases.

- In addition, Black Mississippians have been sufficiently numerous and geographically compact to allow for one majority-Black VAP district as part of a three-district plan for the Mississippi Supreme Court based on the prior decennial Census numbers from 1990, 2000, and 2010.
- As reported in the 1-Year *2021 ACS*, a demographic survey published by the U.S. Census Bureau, in Mississippi non-Hispanic Whites significantly outpace Black Mississippians across most key indicators of socioeconomic well-being, including employment rates, household income, and homeownership.

D. Organization of Report

12. The remainder of this declaration is organized as follows:
13. **Section II** reviews current and historical demographics at the statewide, regional, and county-level.
14. **Section III** examines the three-district Supreme Court plan in effect for elections from 1987 to the present, as well as its immediate predecessor, the three-district 1942 Plan.
15. **Section IV** presents a hypothetical plan demonstrating that a three-member majority-Black VAP Supreme Court district could have been drawn under the 1990 Census and would have remained majority-Black VAP through the 2020 Census.

16. **Section V** presents two illustrative plans based on the 2020 Census. Like the 1987 Plan, both plans contain three three-member districts. Unlike the 1987 Plan, both plans contain one district with a majority-Black VAP.

17. **Section VI** presents two additional “least change” demonstrative plans, which provide for one three-member majority-Black VAP district as part of a three-district plan for the Mississippi Supreme Court while limiting the number of voters and counties that would be shifted from the 1987 Plan.

18. **Section VII** summarizes data from the U.S. Census Bureau documenting socioeconomic disparities experienced by Black Mississippians when compared with their White counterparts, as reported in the *American Community Survey*.

II. DEMOGRAPHIC PROFILE OF MISSISSIPPI

A. Statewide Population – 2010 to 2020

19. The table in **Figure 1** presents the population of Mississippi by race and ethnicity for the 2010 and 2020 decennial censuses.

**Figure 1: Mississippi – 2010 to 2020 Census
Population by Race and Ethnicity**

All Ages	2010	Percent of Total Population	2020	Percent of Total Population	2010-2020 Change	Percent 2010-2020 Change
Total Population	2,967,297	100.00%	2,961,279	100.00%	-6,018	-0.20%
NH White*	1,722,287	58.04%	1,639,077	55.35%	-83,210	-4.83%
Total Minority Pop.	1,245,010	41.96%	1,322,202	44.65%	77,192	6.20%
Latino	81,481	2.75%	105,220	3.55%	23,739	29.13%
NH Black*	1,093,512	36.85%	1,079,001	36.44%	-14,511	-1.33%
NH Asian*	25,477	0.86%	32,305	1.09%	6,828	26.80%
NH Hawaiian and PI*	948	0.03%	1,037	0.04%	89	9.39%
NH American Indian and Alaska Native	13,845	0.47%	14,019	0.47%	174	1.26%
NH Other*	1,828	0.06%	7,174	0.24%	5,346	292.45%
NH Two or More Races	27,919	0.94%	83,446	2.82%	55,527	198.89%
SR Black (Single-race Black)	1,098,385	37.02%	1,084,481	36.62%	-13,904	-1.27%
AP Black (Any Part Black)	1,115,801	37.60%	1,123,613	37.94%	7,812	0.70%

* Single-race, non-Hispanic.

20. According to the 2020 Census, non-Hispanic Whites comprise 55.35% of the population in Mississippi—down from 58.04% in 2010. African Americans are the next largest racial/ethnic category, representing 37.94% of the population in 2020—the highest proportion of any state in the nation and up slightly from 37.60% in 2010. Latinos registered sharp gains between 2010 and 2020, representing 3.55% of the statewide population in 2020—up from 2.75% in 2010.

B. Statewide Voting Age Population (1990 to 2020)

21. As shown in **Figure 2**, in percentage terms, the statewide BVAP has steadily increased over the past 30 years—from 31.63% in 1990 to 36.14% in 2020. During that same time period, the NH White VAP has dropped by nearly ten percentage points, from 67.49% in 1990 to 57.76% in 2020.

**Figure 2: Mississippi – 1990 to 2020 Census
Percent Voting Age Population by Race and Ethnicity**

	1990	% 1990	2000	% 2000	2010	% 2010	2020	% 2020
Total	1,826,455	100.00%	2,069,471	100.00%	2,211,742	100.0%	2,277,599.	100.0%
Black	577,669	31.63%	688,994	33.29%	773,869	34.99%	823,080	36.14%
NH White	1,232,687	67.49%	1,327,768	64.16%	1,348,246	60.96%	1,315,451.	57.76%

C. Distribution of Mississippi's Black Population

22. In the 19th Century, enslaved African Americans began populating the Mississippi Delta via the Mississippi River.⁸ Today, much of the Black population in Mississippi lives in the Delta and adjacent counties—spanning the length of the Mississippi River from DeSoto County in the north to Wilkinson County in the south.

⁸ See “Delta,” *Mississippi Encyclopedia*, <https://mississippencyclopedia.org/entries/delta/>. According to the Mississippi Encyclopedia: “The core counties of the Delta are Bolivar, Coahoma, Humphreys, Issaquena, Leflore, Quitman, Sharkey, Sunflower, Tunica, and Washington. The counties of Carroll, DeSoto, Grenada, Holmes, Panola, Tallahatchie, Tate, Warren, and Yazoo contain alluvial deposits as well and have been part of the Delta’s human history.”

23. The map in **Figure 3** depicts 2020 Black population percentage by county, with transparent overlays. Blue lines identify the state’s ten Planning and Development Districts (“planning districts” or PDDs)), which are Mississippi’s official sub-state regions and are used to define regional boundaries for various administrative, planning, and development purposes.⁹ Red lines depict areas where the boundaries of current majority-Black Congressional District 2 (“CD 2”) diverge from planning district boundaries.¹⁰

24. In addition to existing district lines such as CD 2, Mississippi’s planning districts are a useful reference point for constructing electoral districts in the state. In the 1960s, local Mississippi officials created the PDDs as an administrative and governance structure to “allow communities to collectively address problems.”¹¹ Since then, “each PDD [has] represent[ed] a distinctly different region of the state,” and each district’s responsibilities span “community and economic development,” “health and social services,” “small business assistance,” “workforce development,” “loan assistance,” and Medicaid case management, among other “local needs and

⁹ See, e.g., Miss. Assoc. of Planning and Dev. Districts, “2022 Directory,” <http://mspdds.org/directory/>.

¹⁰ Specifically, CD 2 excludes DeSoto and Tate Counties in the North Delta PD and excludes Lincoln, Pike, Lawrence, and Walthall Counties in the Southwest PD. On the other hand, CD 2 extends east of the Delta to include Leake County in the East Central PD.

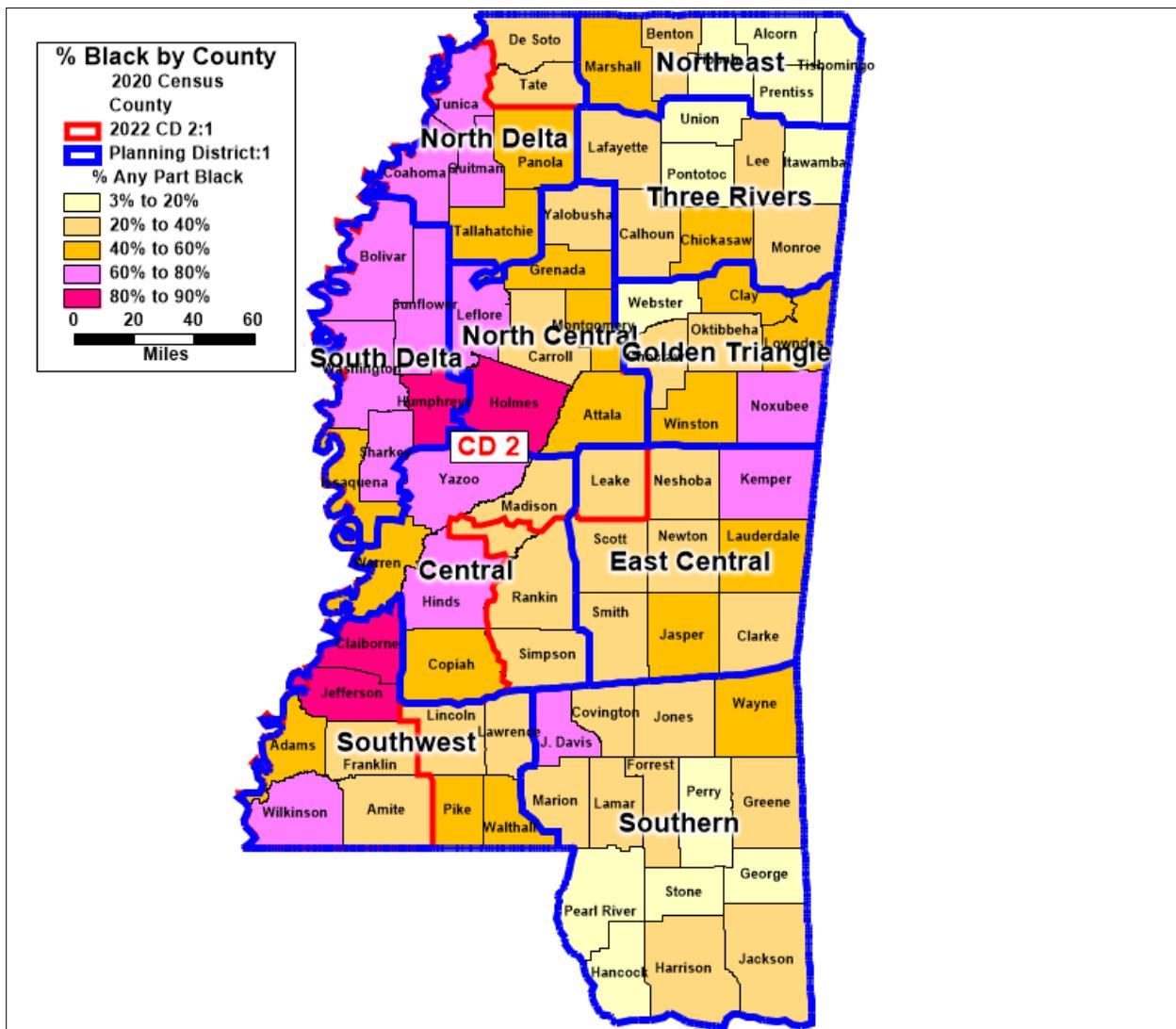
¹¹ Miss. Assoc. of Planning and Dev. Districts, “What is a PDD,” <http://mspdds.org/what-is-a-pdd/>.

priorities.”¹² As such, PDD boundaries, by definition, delineate parts of Mississippi that share policy interests.

25. **Exhibit C-1** is a higher resolution version of the **Figure 3** map. **Exhibit C-2** reports total population and Black population percentage by county for the 1990 through 2020 decennial censuses.

¹² *Id.*

**Figure 3: 2020 Percent Black by County
Planning Districts (blue lines) and 2022 CD 2 (red)**



26. **Figure 4** reveals that about 58% (651,798 of 1.12 million) of Black Mississippians live in the five planning districts running north-south along the Mississippi and Yazoo Rivers—North Delta, South Delta, North Central, Central, and Southwest (bolded in Figure 4).

**Figure 4: Mississippi Planning Districts – 2020 Census
Population by Race and Ethnicity**

Planning District	Population	AP Black	% AP Black	Latino	% Latino	NH White	% NH White
Central	619,700	297,220	48.0%	17,197	2.8%	288,467	46.5%
East Central	227,806	88,263	38.7%	8,496	3.7%	119,855	52.6%
Golden Triangle	175,474	76,701	43.7%	3,447	2.0%	90,528	51.6%
North Central	117,158	65,758	56.1%	2,016	1.7%	47,944	40.9%
North Delta	296,649	120,419	40.6%	12,631	4.3%	154,476	52.1%
Northeast	141,811	31,216	22.0%	4,993	3.5%	102,531	72.3%
South Delta	114,801	80,599	70.2%	2,319	2.0%	30,680	26.7%
Southern	805,302	205,707	25.5%	40,696	5.1%	523,916	65.1%
Southwest	176,046	87,802	49.9%	2,860	1.6%	82,779	47.0%
Three Rivers	286,532	69,928	24.4%	10,565	3.7%	197,901	69.1%

27. African Americans comprise about half (49.2%) of the 2020 population (1.32 million) in those five planning districts. The ideal population size for a 2020 Supreme Court district is 987,093—so these five planning districts encompass about 350,000 persons more than necessary to constitute a single Supreme Court district.

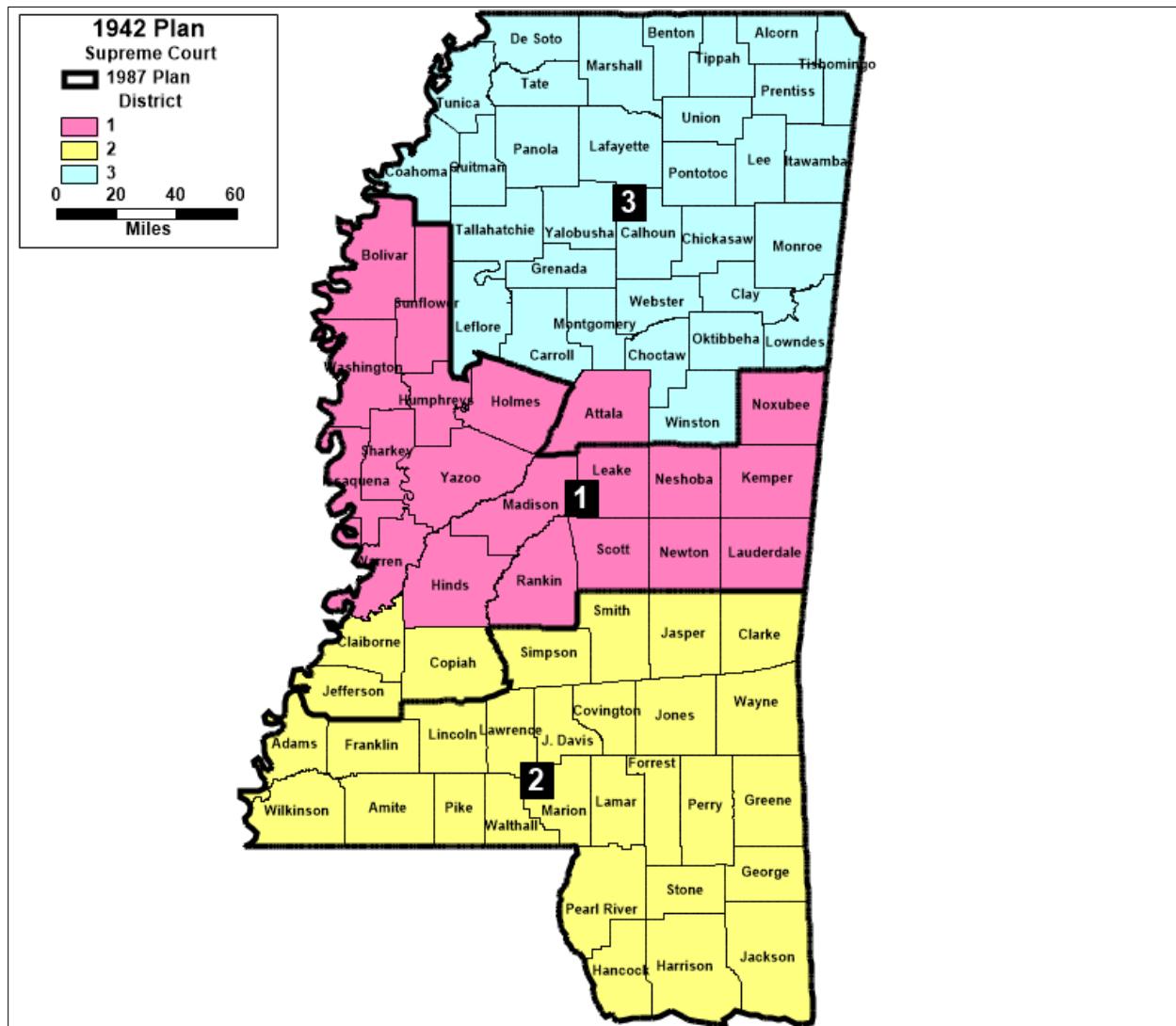
28. Under the 2020 Census, CD 2 (62.15% BVAP), which largely overlaps with those five planning districts, contains a population of 740,319 persons—about 250,000 persons short of the ideal district size for the three-district Supreme Court.

29. Taking paragraphs 23 through 28 into account, one can immediately ascertain that a majority-Black Supreme Court district anchored in the Delta region can be drawn in and around CD 2 and the five planning districts that border the Mississippi and Yazoo Rivers.

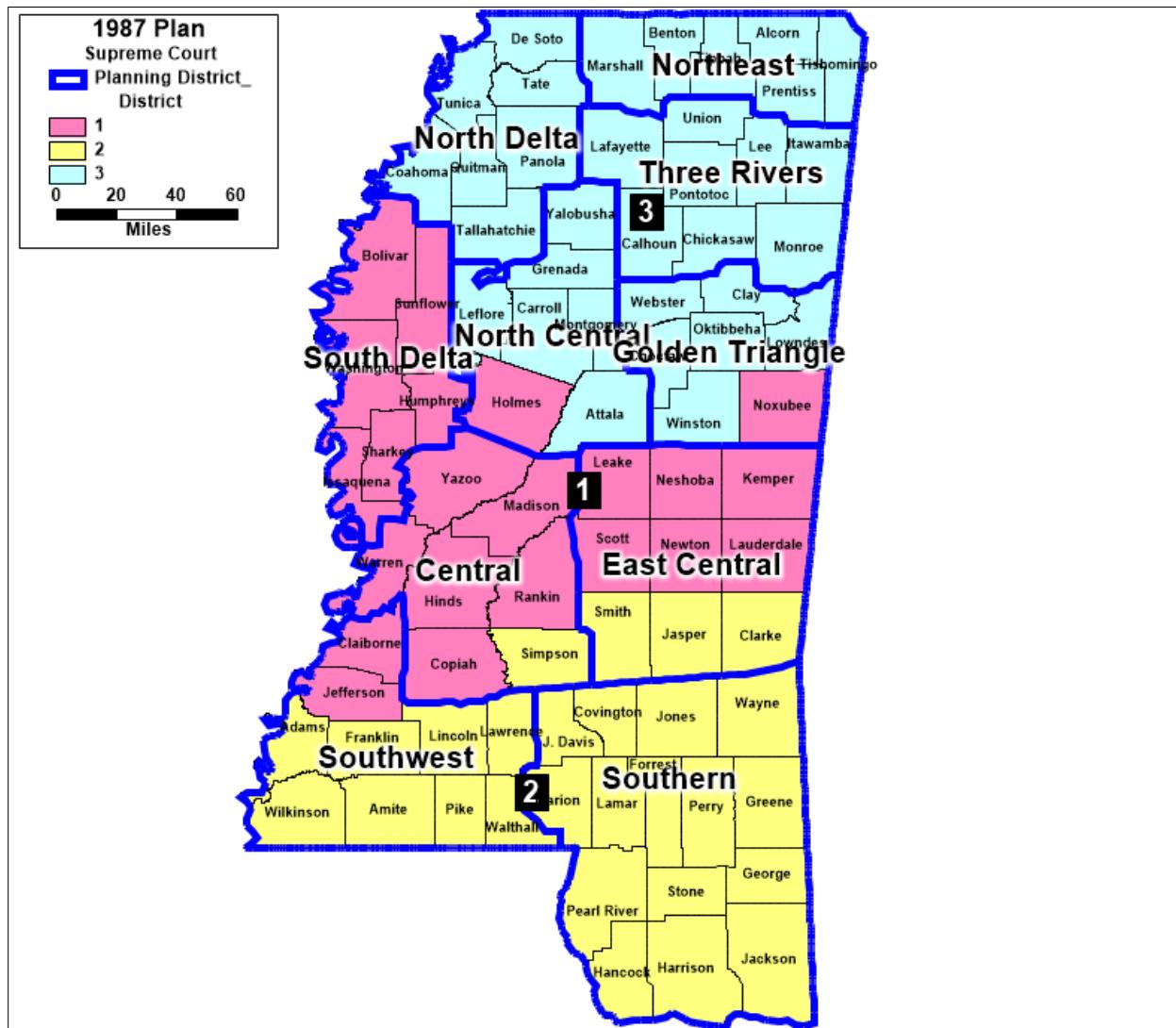
III. ENACTED SUPREME COURT PLANS (1942 AND 1987)

A. Historical 1942 Plan

30. The map in **Figure 5** depicts the 1942 Supreme Court Plan, with an overlay (black lines) showing the 1987 Plan. To create the 1987 Plan, Attala County was shifted into Supreme Court District 3 from 1942 Supreme Court District 1. In turn, Claiborne, Copiah, and Jefferson Counties were shifted from 1942 Supreme Court District 2 into Supreme Court District 1.

Figure 5: 1942 Supreme Court Plan**B. Enacted 1987 Plan**

31. A map of the 1987 Plan is depicted in **Figure 6**, overlaid on the ten planning districts discussed above. Corresponding decade-by-decade population statistics are included in the table in **Figure 7**.

Figure 6: Current 1987 Supreme Court Plan**Figure 7: Enacted 1987 Supreme Court Plan
Percent Black Voting Age by Decade**

District	1990*	2000	2010	2020
1	42.24%	45.77%	48.6%	49.29%
2	23.91%	24.99%	26.3%	27.66%
3	28.49%	29.44%	30.9%	32.65%

* SR BVAP

32. The Enacted 1987 Plan dilutes Black voting strength. In particular, 1987 Supreme Court District 1 “cracks”¹³ Mississippi’s Black population because it does not encompass a number of majority-Black counties in the north Delta as well as the southwest corner of the state. Instead, Supreme Court District 1 extends east from the Delta into a predominantly White area within the confines of the Appalachian Regional Commission (“ARC”—a distinct regional, cultural, and economic community of interest separate from the Delta.¹⁴

33. As shown in the map in **Exhibit D**, the ARC area extends south and west from the foothills of Tishomingo County to a band of counties¹⁵ in the mid-section of the state—following the trajectory of the historical Natchez Trace (the land route into Mississippi for many 19th Century White settlers) and the modern-day Tennessee-Tombigbee Waterway.

34. To be sure, two more sparsely-populated Black-majority ARC counties—Noxubee and Kemper, with a combined 2020 total population of

¹³ “Cracking” is a term used by redistricting practitioners to identify election districts that unnecessarily fragment or divide the minority population, resulting in an overall dilution of minority voting strength in the voting plan

¹⁴ Appalachian Regional Commission, “About the Appalachian Region,” <https://www.arc.gov/about-the-appalachian-region/>.

¹⁵ The counties in Mississippi that are part of the ARC include Alcorn, Benton, Calhoun, Chickasaw, Choctaw, Clay, Itawamba, Kemper, Lee, Lowndes, Marshall, Monroe, Montgomery, Noxubee, Oktibbeha, Panola, Pontotoc, Prentiss, Tippah, Tishomingo, Union, Webster, Winston, and Yalobusha. See Appalachian Regional Commission, “Mississippi,” <https://www.arc.gov/mississippi/>.

19,273—are in 1987 Supreme Court District 1, but the other counties east of the Delta in District 1 are all majority-White.

35. As shown in the **Figure 6** map, the 1987 Plan splits five of the ten regional planning districts—North Central, Central, East Central, Golden Triangle and Southwest. Supreme Court District 1 contributes to each one of those splits. South Delta is the only planning district entirely in Supreme Court District 1.

36. A higher resolution version of the 1987 Plan as depicted in **Figure 6** is in **Exhibit E-1**. Summary population statistics, applying the 2020 Census data to the boundaries from the 1987 Plan, are in **Figure 8** below, with additional population details in **Exhibit E-2**. **Exhibit E-3** identifies county assignments by district.

37. At the time of enactment, in terms of Black voting strength, there was almost no difference between the 1987 Plan and the 1942 Plan. Under the 1990 Census, 1942 Plan Supreme Court District 1 contained a 41.08% BVAP—a mere 1.2% lower than the BVAP of District 1 under the 1987 Plan.¹⁶

38. Today, 35 years later and after more than three decades of statewide Black population growth and White population decline, 1987 Supreme Court

¹⁶ Voting age by race and ethnicity was not reported in the 1980 PL-94 171 file.

District 1 is only a 4 percentage-point plurality BVAP district (49.29% BVAP, 45.35% NH White VAP), as shown in the table in **Figure 8**.

39. Moreover, and perhaps unsurprisingly given that there has been no redistricting in over 30 years, the population deviation among the districts is greater than 10%, which in the state legislative context would be considered a presumptive violation of “one person, one vote” principles.

Figure 8: Current 1987 Plan – 2020 Census

District	Population	% Dev.	18+ Pop	% 18+ Black	% 18+ Latino	% 18+ NH White
1	933847	-5.39%	716402	49.29%	2.54%	45.35%
2	1037093	5.07%	796767	27.66%	3.65%	64.94%
3	990339	0.33%	764430	32.65%	2.79%	61.90%

40. Furthermore, even that slight plurality may disappear when the effects of felony disenfranchisement in Mississippi are taken into account. Black people of voting age are disproportionately disenfranchised in Mississippi due to a felony conviction. An analysis by *Mississippi Today* found that, from 1994 through 2017, 61% of Mississippians who lost their right to vote due to a felony conviction were Black, even though Black people represent only 36% of the state’s voting age population.¹⁷ A Fifth Circuit judge recognized this in a recent concurring opinion.

See Harness v. Watson, 47 F.4th 296, 316 (5th Cir. 2022) (Ho, J., concurring in part

¹⁷ Alex Rozier, *Racial disparity conspicuous among Mississippians banned from voting*, *Mississippi Today* (Feb. 22, 2018), <https://mississippitoday.org/2018/02/22/racial-disparity-conspicuous-among-mississippians-banned-voting/>.

and concurring in the judgment) (noting that Mississippi's felon disenfranchisement scheme "operates today to disproportionately disenfranchise African-Americans"); *id.* at 314–15 n.3 ("No one denies that there's a meaningful disparity between the disenfranchised population and the entire population of Mississippi.").¹⁸ And there is no reason to conclude that this impact will diminish in the future – the population incarcerated in state facilities has climbed from 16,499 in 2017 to 18,000 in 2022.¹⁹

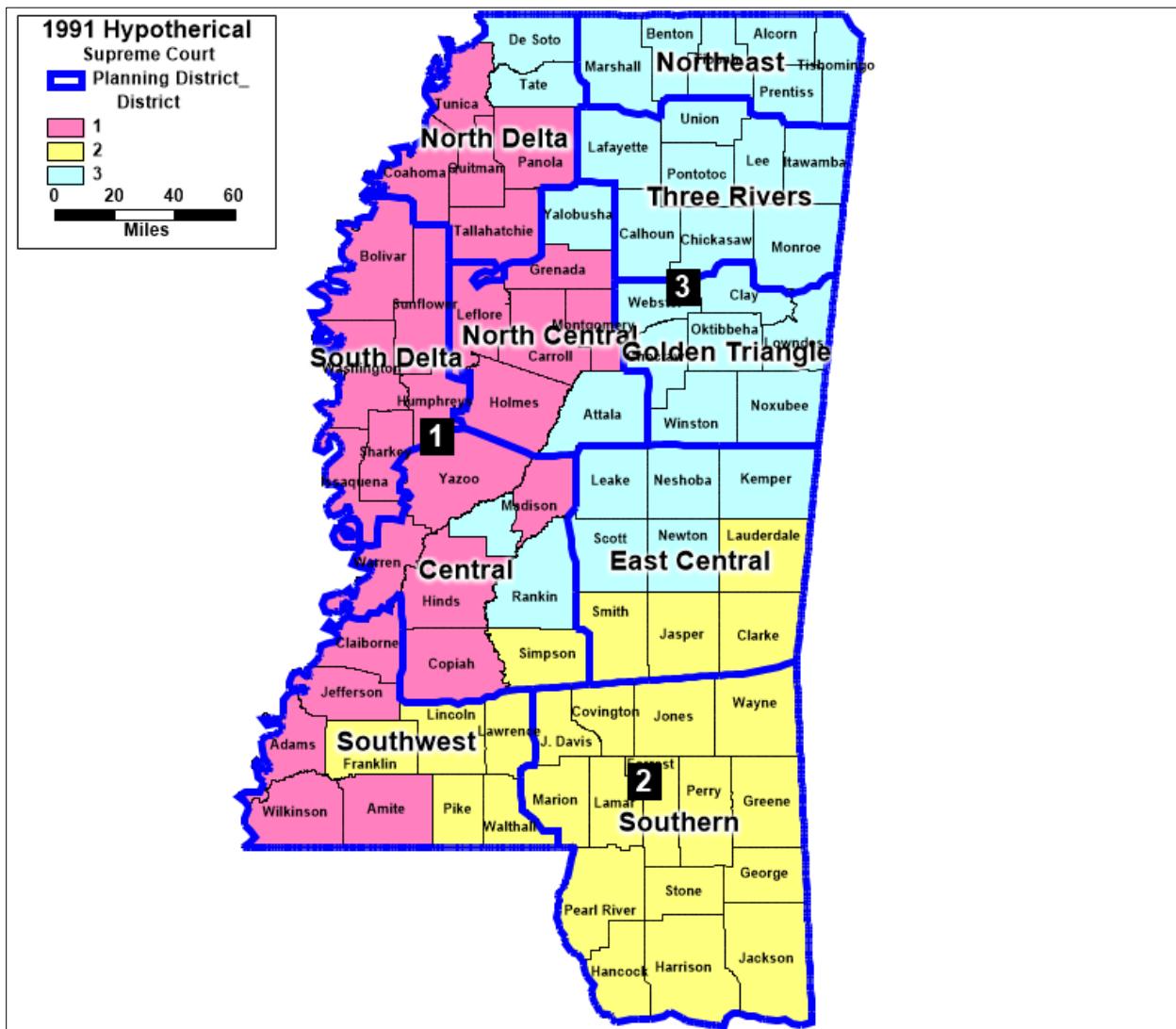
¹⁸ The expert reports submitted in the underlying litigation reached the same conclusion. See Report of Dov Rothman at 3, *Harness v. Hosemann*, No. 3:17-cv-00791-DPJ-FKB, Dkt. 65-1 (S.D. Miss. Oct. 4, 2018) ("A greater percentage of the Disenfranchised Individuals (59 percent) . . . are black compared to the percentage of the citizen voting-age population of Mississippi that are black (36 percent), as reported by the U.S. Census Bureau for 2017."); Declaration of Matthew A. Williams at 2, *v. Hosemann*, No. 3:17-cv-00791-DPJ-FKB, Dkt. 75-12 (S.D. Miss. Oct. 4, 2018) ("[B]lack adults are 2.7 times more likely to have been convicted of a disfranchising crime than white adults.").

¹⁹ Jerry Mitchell, '*Foolishly sticking with failed system': Mississippi leads the world in mass incarceration*, Jackson Clarion-Ledger (Aug. 13, 2022), <https://www.clarionledger.com/story/news/2022/08/13/mississippi-has-more-inmates-per-capita-than-any-state-nation/10317601002/>.

IV. HYPOTHETICAL 1990, 2000, AND 2010 SUPREME COURT PLANS

41. The map in **Figure 9** demonstrates that a majority-BVAP Supreme Court district in a three-district plan could have been drawn based on the 1990 Census.

Figure 9: Hypothetical 1991 Plan (1990 Census)



42. As shown in the map in **Figure 9**, the 1991 Hypothetical Plan is comprised of whole counties, except for a split along 1990 precinct lines in Madison County.²⁰

43. The table in **Figure 10** presents decennial Census population statistics for the 1991 Hypothetical Plan. According to the 1990 Census, 1991 Hypothetical Supreme Court District 1 had an SR BVAP of 50.35%, with a deviation²¹ of -4.63% (-39,732 persons) from the ideal district size of 857,739.²² 1991 Hypothetical Supreme Court District 1 would have remained majority-Black over the course of the past 35 years.

Figure 10: 1991 Hypothetical Plan Percent Black Voting Age by Decade

²⁰ See Mississippi Automated Resource Information System, *1990 Voting Precincts*, https://www.maris.state.ms.us/HTML/DATA/data_Political/1990VotingPrecincts.html#gsc. The 1990 precinct boundaries were established by the Mississippi Standing Joint Legislative Committee on Reapportionment for use in 1991 legislative redistricting.

²¹ In the redistricting context, “deviation” refers to the difference between the populations of electoral districts. A deviation metric is calculated by summing the absolute value of the most underpopulated district deviation (a negative value representing the percentage by which a district population falls below the ideal size) plus the value of the most overpopulated district deviation (a positive value representing the percentage by which a district population is above the ideal size). The resulting summation is usually referred to as “total deviation.”

²² The Census Bureau estimates that there was a 2.6% undercount of Black persons in the 1990 Census. Put differently, 33,990 Black persons in Mississippi were missed in the 1990 enumeration. See U.S. Census Bureau, *Mississippi - Net Undercount and Undercount Rate for Counties (1990)*, <https://www2.census.gov/programs-surveys/decennial/1990/data/undercounts/mississippi.pdf>.

District	1990*	2000	2010	2020
1	50.35%	56.3%	61.0%	62.9%
2	22.98%	24.1%	26.0%	27.4%
3	23.48%	24.3%	25.9%	27.9%

* SR BVAP

44. According to the 2000 Census, by 2000 the 1991 Hypothetical Plan Supreme Court District 1 would have become underpopulated (-13.31%). However, based on the 2000 Census, a Hypothetical 2001 Supreme Court District 1 could have been drawn as a majority-Black district (53.1% AP BVAP, -0.67% deviation, **Exhibit F-1**) without splitting any counties. And a similar majority-Black Hypothetical 2011 Supreme Court District 1 could have been drawn under the 2010 Census (55.31% AP BVAP, -1.79% deviation, **Exhibit F-2**), also without splitting counties.

45. As the 1991, 2001, and 2011 Hypothetical Plans demonstrate, it has been possible to draw a Black-majority District 1 for decades, and it has been possible to do so with whole counties since at least 2001, all while maintaining acceptable population deviations. And, just as easily, the 1987 Plan can be modified to meet Section 2 requirements of the Voting Rights Act, as described in **Section V**.

V. **GINGLES 1 ILLUSTRATIVE PLANS**

A. Illustrative Plans and Traditional Redistricting Principles

46. The two illustrative plans that I have developed contain three districts—each with one majority-Black district. Both illustrative plans comply with traditional redistricting principles, including compactness, contiguity, respect for communities of interest, and the non-dilution of minority voting strength, as well as ensuring that districts are not malapportioned.

47. The illustrative plans meet the first *Gingles* precondition, i.e., they demonstrate that the Black population in Mississippi is sufficiently numerous and geographically compact to allow for the creation of at least one 3-member majority-Black district.

48. There is no question that Mississippi’s Black population is “geographically compact.” For example, and by way of reference, the nine-single member district plan shown in **Exhibit G** contains three contiguous majority-Black VAP districts (Districts 4, 5, and 6)—demonstrating beyond a shadow of doubt that the Black population is compactly distributed north-to-south in and around the Delta.

B. Illustrative District Plans – Key Features

49. Key features of the two illustrative plans are summarized below:

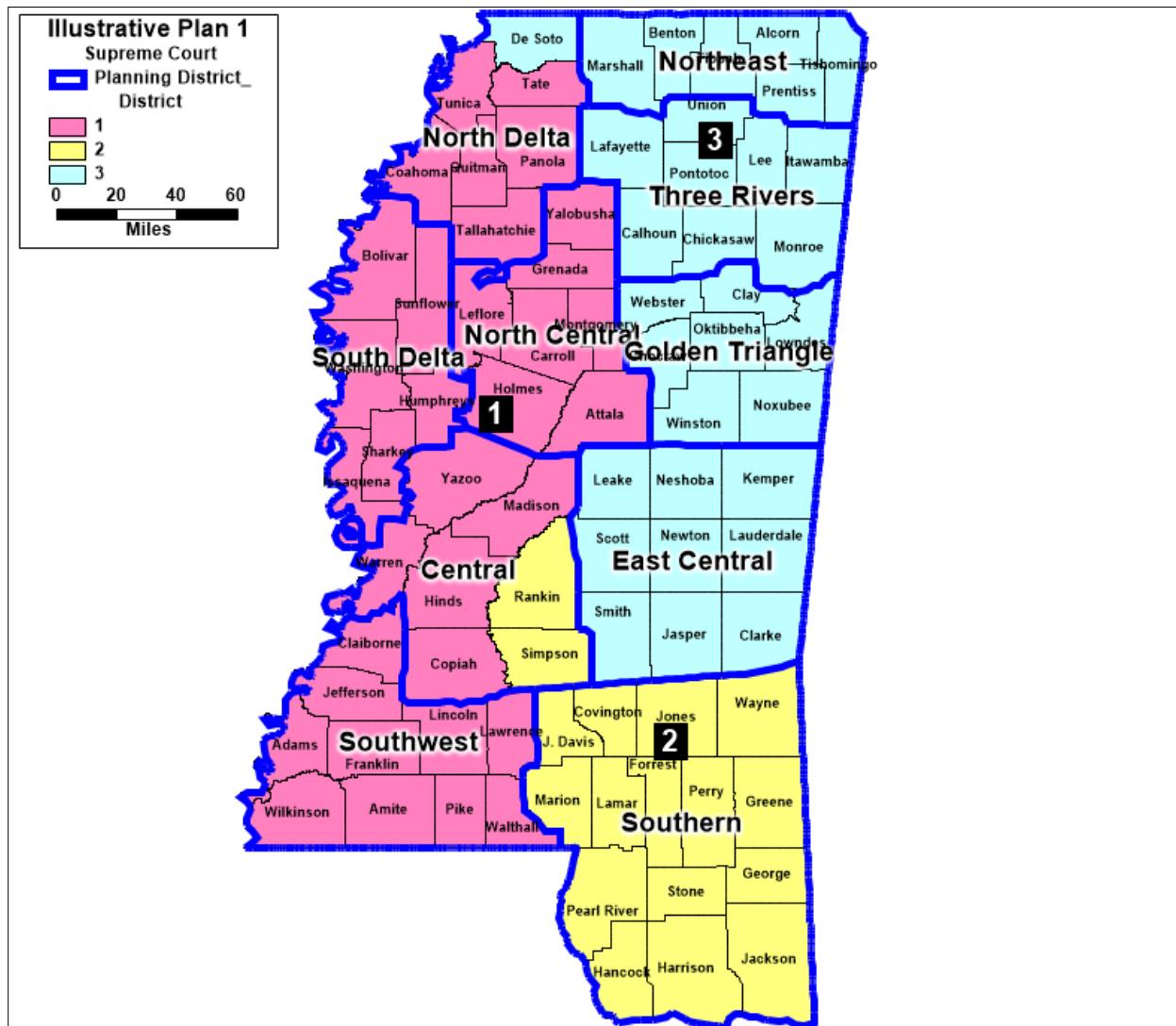
- Consistent with the 1987 Plan, the illustrative plans follow county boundaries. There are no county splits.
- The illustrative plans generally follow state-defined regional Planning and Development district boundaries.
- The illustrative plans unite Black voters in the Delta in a majority-Black Supreme Court District 1—rather than dividing them between Districts 1 and 3, as under the 1987 Plan—thereby respecting the Delta as a significant cultural and historical community of interest in Mississippi.
- The illustrative plans also unite voters who live along the Mississippi River, as opposed to the three-way split created by the 1987 Plan. Delta voters concerned about water-related issues are, therefore, placed on an equal footing with voters in the Tennessee-Tombigbee region and the Gulf Coast, which are placed entirely within a single-judicial district under both the 1987 Plan and the illustrative plans.²³
- Under the illustrative plans, Supreme Court District 1 aligns closely with the boundaries established for CD 2, Mississippi’s Second Congressional District, under the 2022 Congressional Plan enacted by the State—boundaries that recognize a Delta-based, predominantly Black community of interest rather than fracturing that community as in the 1987 Plan.
- Under the illustrative plans, Illustrative Supreme Court District 3 encompasses most of the counties in the federally defined Appalachian Regional Commission, respecting that community of interest.
- Under the illustrative plans, approximately 50% of Mississippi’s Black voting age population would live in a majority-Black district—up from 0% under the 1987 Plan.

²³ The flood-prone Pearl River cuts through the center of the state from Leake County to the Gulf. Its drainage area encompasses all three Supreme Court districts under the illustrative plans, as is the case with the 1987 Plan.

C. Illustrative Plan 1

50. The map in **Figure 10** depicts Illustrative Plan 1. A higher resolution version of Illustrative Plan 1 is in **Exhibit H-1**. Summary population statistics are in **Figure 11** below, with additional population details in **Exhibit H-2**. **Exhibit H-3** identifies county assignments by district.

51. Illustrative Plan 1 splits two planning districts—North Delta (placing DeSoto County in Supreme Court District 3) and Central (placing Rankin and Simpson Counties in Supreme Court District 2)—rather than five as in the 1987 Plan.

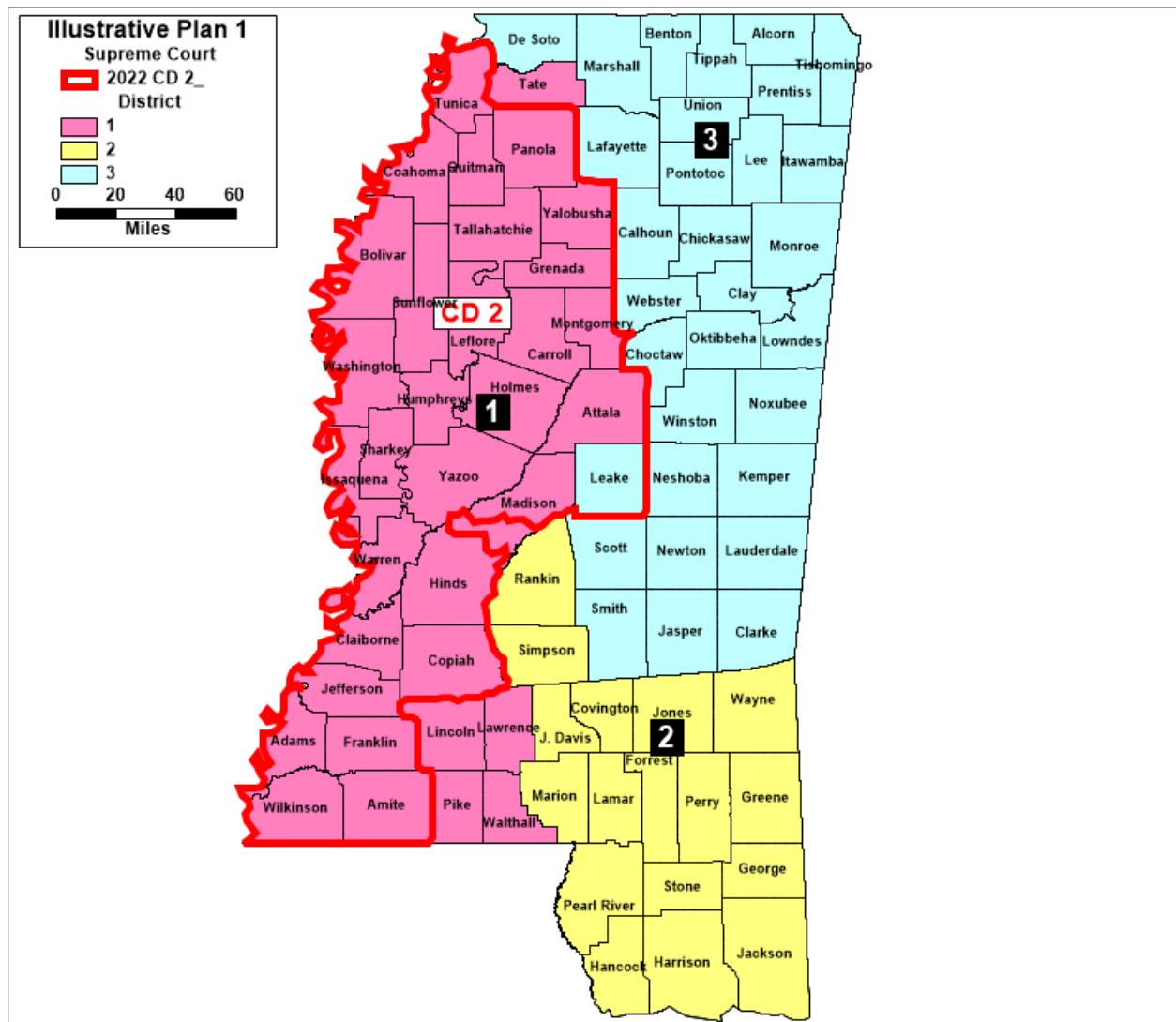
Figure 10: Illustrative Plan 1**Figure 11: Illustrative Plan 1—2020 Census**

District	Population	% Dev.	18+ Pop	% 18+ Black	% 18+ Latino	% 18+ NH White
1	956060	-3.14%	737689	55.31%	2.04%	40.9%
2	988282	0.12%	757569	23.51%	3.96%	68.4%
3	1016937	3.02%	782341	30.29%	3.02%	63.4%

52. As shown in **Figure 12**, District 1 significantly resembles CD 2 in the 2022 Congressional Plan (red lines depict CD 2). Three quarters of the total

population in CD 2 (75.21%) is assigned to Supreme Court District 1 and 85.36% of the Black Population in CD 2 is in District 1.

Figure 12: Illustrative Plan 1 (and CD 2 overlay)

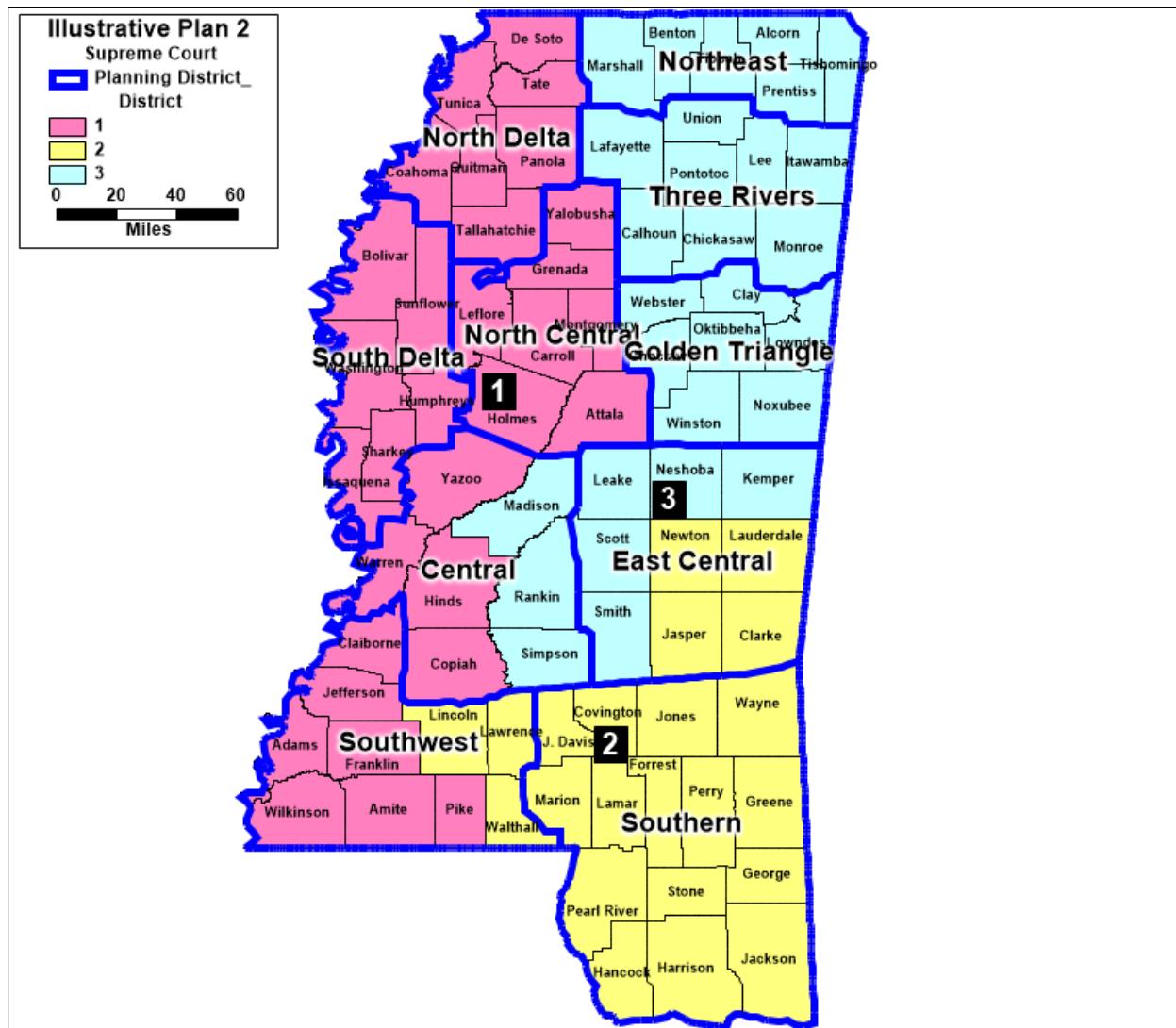


53. Under Illustrative Plan 1, District 1 (55.31% BVAP) generally follows CD 2 district lines north to south. In the north, Supreme Court District 1 extends beyond CD 2 to include Tate County (part of the historical Delta). Madison County is entirely in Supreme Court District 1 rather than split as with CD 2. South of

Copiah County, in order to minimize population deviation, Illustrative Supreme Court District 1 extends east beyond the CD 2 boundary to encompass all of the Southwest Planning District counties.

D. Illustrative Plan 2

54. The map in **Figure 13** depicts Illustrative Plan 2. A higher resolution version of Illustrative Plan 2 is in **Exhibit I-1**. Summary population statistics are in **Figure 14** below, with additional population details in **Exhibit I-2**. **Exhibit I-3** identifies county assignments by district.

Figure 13: Illustrative Plan 2**Figure 14: Illustrative Plan 2 – 2020 Census**

District	Population	% Dev.	18+ Pop	% 18+ Black	% 18+ Latino	% 18+ NH White
1	971422	-1.59%	746385	54.19%	2.45%	41.4%
2	997491	1.05%	770854	28.27%	2.84%	65.6%
3	992366	0.53%	760360	26.40%	3.75%	65.9%

55. Under Illustrative Plan 2, Supreme Court District 1 (54.2% BVAP) encompasses the entire historical Delta (including DeSoto County), as well as most of the counties in the Southwest Planning District.

56. Illustrative Plan 2 splits three planning districts. Two splits involve Supreme Court District 1— Central (placing the counties of Madison, Rankin, and Simpson in District 3) and Southwest (placing Lincoln, Lawrence, and Walthall in District 2).

VI. LEAST CHANGE PLANS

57. The illustrative plans demonstrate that there are viable remedies in this Section 2 lawsuit which are sufficient to satisfy *Gingles* 1. However, alternative plan configurations beyond those presented in the two main illustrative plans are also possible.

58. For example, compared to the illustrative plans, the two “least change plans” described below are sub-optimal in terms of Black voting strength in Supreme Court District 1 and preservation of regional communities of interest across all three districts. However, the least change plans still fare better than the 1987 Plan on those scores. And under the least change plans, fewer voters would be shifted from their current 1987 districts in the process of creating a Delta-anchored majority-Black Supreme Court 1 as compared to the illustrative plans.

A. Least Change Plan 1

59. The map in **Figure 15** depicts Least Change Plan 1. A higher resolution version of Least Change Plan 1 is in **Exhibit J-1**. Summary population statistics are in **Figure 16**, with additional population details in **Exhibit J-2**. **Exhibit J-3** identifies county assignments by district.

60. Least Change Plan 1 shifts Madison County from Supreme Court District 1 into District 3. In turn, five majority-Black counties in the northern Delta are moved into District 1—Coahoma, Leflore, Quitman, Tallahatchie, and Tunica. Two

majority-Black counties bordering the Mississippi River are moved into Supreme Court District 1 from District 2—Adams and Wilkinson. Least Change Plan 1 thus maintains the overall east-west configuration of the 1987 Plan, while also better uniting the Mississippi Delta and creating a majority Black District 1.

Figure 15: Least Change Plan 1

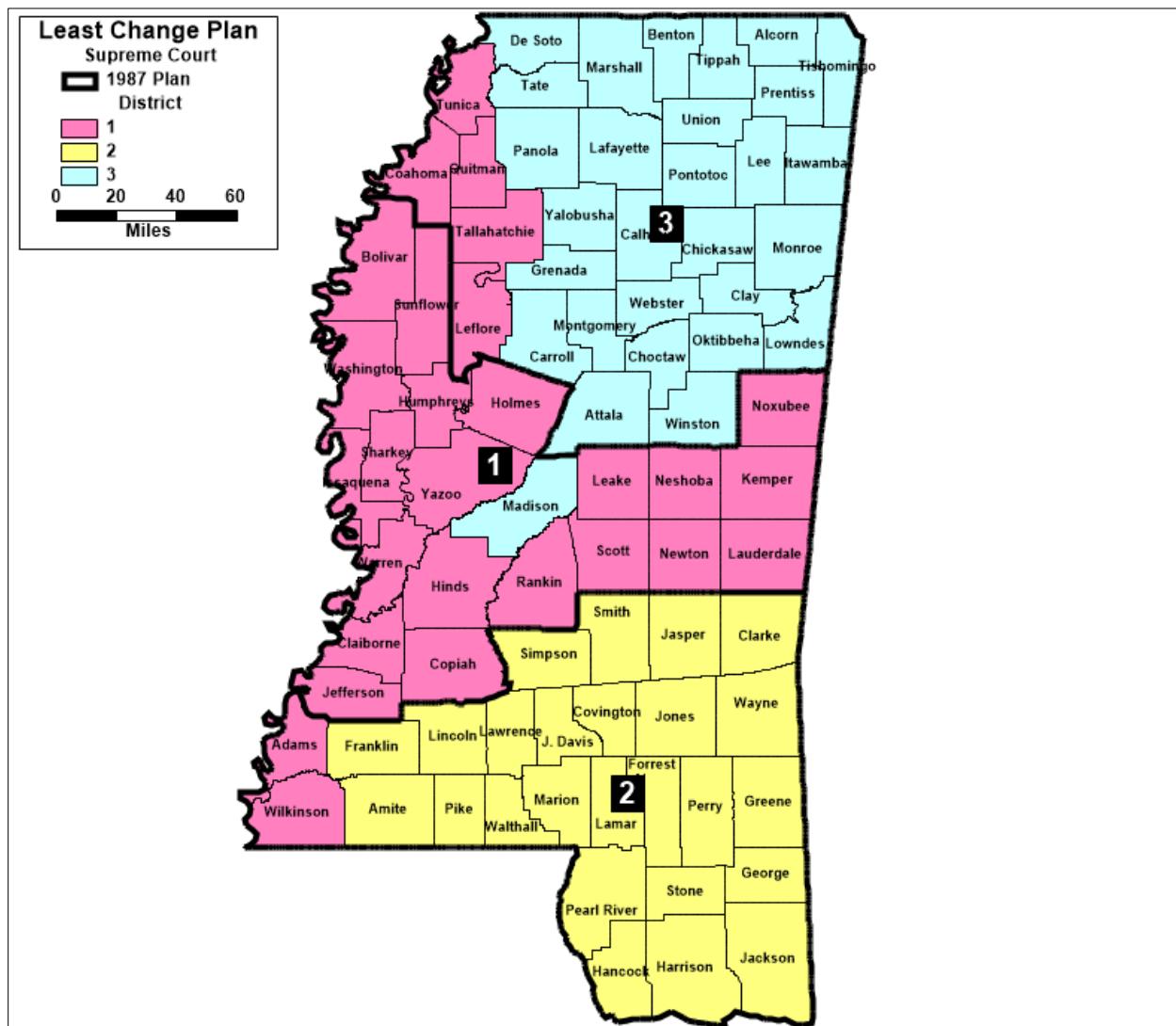


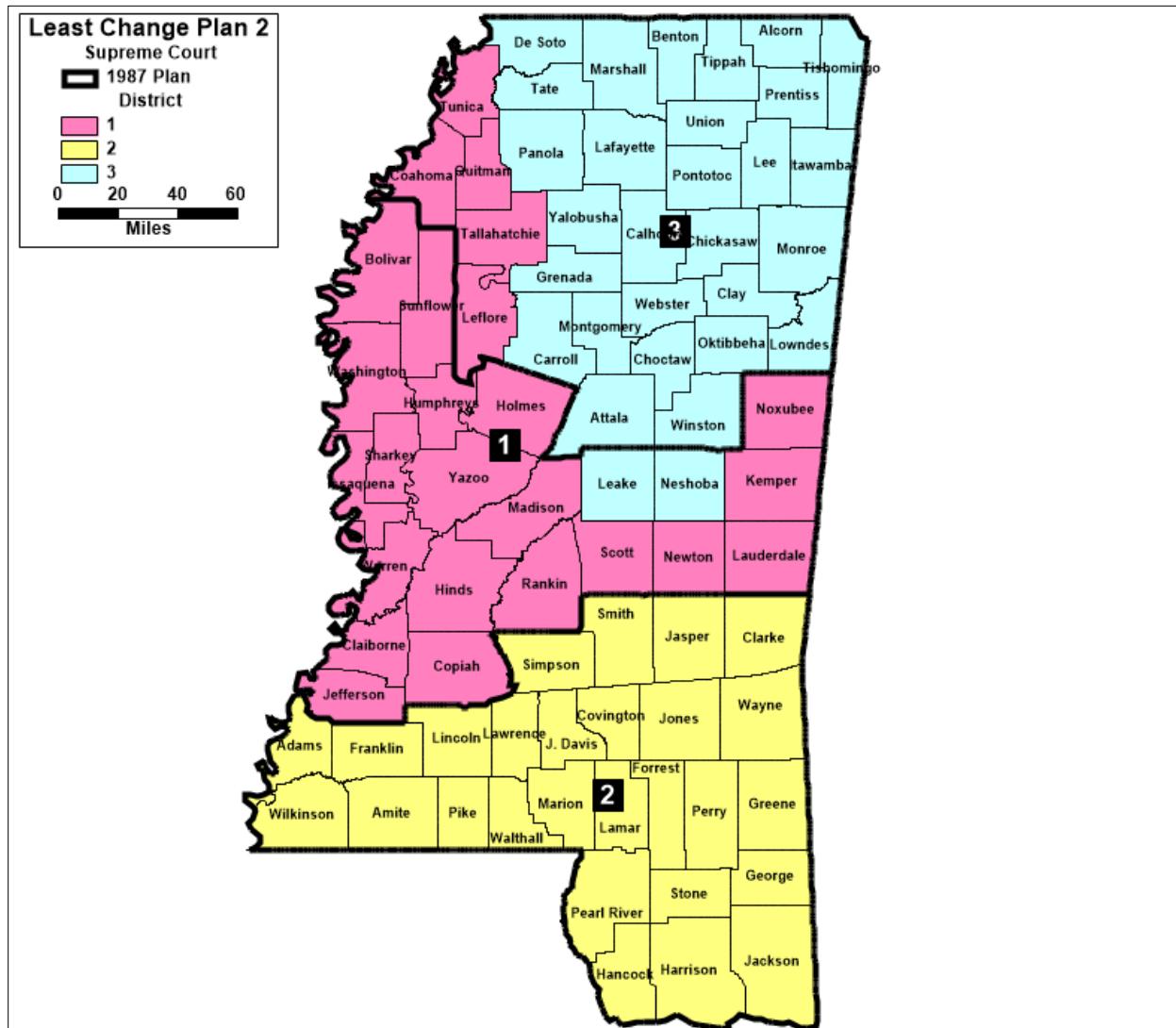
Figure 16: Least Change Plan 1 – 2020 Census

District	Population	% Dev.	18+ Pop	% 18+ Black	% 18+ Latino	% 18+ NH White
1	941229	-4.65%	722892	53.00%	2.48%	42.1%
2	998968	1.20%	766360	26.46%	3.67%	66.0%
3	1021082	3.44%	788347	30.09%	2.87%	64.1%

B. Least Change Plan 2

61. The map in **Figure 17** depicts Least Change Plan 2. Summary population statistics are **Figure 18**. A higher resolution version of Least Change Plan 2 is in **Exhibit K-1**. Summary population statistics are **Figure 15**, with additional population details in **Exhibit K-2**. **Exhibit K-3** identifies county assignments by district.

62. Least Change Plan 2 also maintains the overall east-west configuration of the 1987 Plan. Under Least Change Plan 2, Madison County remains in Supreme Court District 1. Like Least Change Plan 1, five majority-Black counties in the northern Delta are moved into District 1 from District 3— Coahoma, Leflore, Quitman, Tallahatchie, and Tunica. Leake and Neshoba Counties are moved into District 3 from District 1. District 2 is completely unchanged from the 1987 Plan.

Figure 17: Least Change Plan 2**Figure 18: Least Change Plan 2 – 2020 Census**

District	Population	% Dev.	18+ Pop	% 18+ Black	% 18+ Latino	% 18+ NH White
1	961887	-2.55%	738384	52.01%	2.52%	43.3%
2	1037093	5.07%	796767	27.66%	3.65%	64.9%
3	962299	-2.51%	742448	29.45%	2.82%	64.5%

VII. SOCIOECONOMIC PROFILE OF MISSISSIPPI

63. As in most other Section 2 cases where I have served as an expert, I also reviewed the socioeconomic statistics for Mississippi published by the Census Bureau in the *American Community Survey* (“ACS”).

64. In Mississippi, African Americans trail NH whites across most key indicators of socioeconomic well-being. This disparity is summarized below and depicted with further detail in the charts in **Exhibit L-1** and the table in **Exhibit L-2**, as reported in *Table S0201* from the *2021 1-year ACS*.²⁴

(a) Income

- 30.9% of African Americans in Mississippi live in poverty, compared to 11.5% of Whites. (**Exhibit L-1 at p. 2** and **Exhibit L-2 at p. 11**)
- 44.5% of African-American children live in poverty, compared to 12.9% of White children. (**Exhibit L-1 at p. 2** and **Exhibit L-2 at p.11**)
- African-American median household income is \$33,541, compared to the \$61,318 median income for White households. (**Exhibit L-1 at p. 5** and **Exhibit L-2 at p.9**)
- Per capita income disparities in Mississippi track the disparities seen in median household income. African-American per capita income is \$18,368, compared to White per capita income of \$33,374. (**Exhibit L-1 at p. 7** and **Exhibit L-2 at p. 10**)

²⁴ U.S. Census Bureau, “Selected Population Profile in the United States,” <https://data.census.gov/cedsci/table?text=s0201&t=001%3A005%3A451&g=0400000US28&y=2021&tid=ACSSPP1Y2021.S0201&moe=false&tp=false>. For statistics from the 1-year ACS, as elsewhere in this declaration, “White” refers to NH White. “Black” or “African American” refers to Any Part Black.

- 24.6% of African-American households rely on food stamps (SNAP), more than triple the 7.0% SNAP participation rate of White households. (**Exhibit L-1 at p. 8 and Exhibit L-2 at p. 10**)

(b) Education

- Of persons 25 years of age and over, 17.9% of African Americans have not finished high school, compared to 10.1% of their White counterparts. (**Exhibit L-1 at p. 10 and Exhibit L-2 at p. 3**)
- At the other end of the educational scale, for ages 25 and over, 18.2% of African Americans have a bachelor's degree or higher, compared to 28.6% of Whites. (**Exhibit L-1 at p. 10 and Exhibit L-2 at p. 4**)

(c) Employment

- The Black unemployment rate (for the population over 16, expressed as a percent of the civilian labor force) is 10.5%, compared to a 3.9% White unemployment rate. (**Exhibit L-1 at p. 12 and Exhibit L-2 at p. 6**)
- Of employed African Americans, 26.2% are in management or professional occupations, compared to 41.1% rate of Whites. (**Exhibit L-1 at p. 13 and Exhibit L-2 at p. 7**)

(d) Housing

- In Mississippi, a little over half of African-American householders (53.8%) are homeowners, while more than three quarters of White households (80.1%) are owner-occupied. (**Exhibit L-1 at p. 14 and Exhibit L-2 at p. 12**)
- Median home value for African-American homeowners is \$95,800, compared to the \$162,200 median home value for Whites. (**Exhibit L-1 at p. 15 and Exhibit L-2 at p. 13**)

(e) Transportation/Communication

- One in ten African-American households (10.0%) lacks access to a vehicle, while 4.3% of White households are without a vehicle. (**Exhibit L-1 at p. 17 and**

Exhibit L-2 at p. 12)

- There is about a four-point Black-White gap in households with a computer, smartphone or tablet—88.7% versus 93.0%. (**Exhibit L-1 at p. 18** and **Exhibit L-2 at p. 13**)
- With respect to broadband internet connections, African-American households trail White households—77.1% versus 84.4%. (**Exhibit L-1 at p. 18** and **Exhibit L-2 at p. 13**)

65. Based on the 2020 Census, 39.5% of the Black population in Mississippi lives in the area encompassed by CD 2 under the 2011 Plan.

Exhibit M-1 and **M-2** report socioeconomic disparities specific to 2011 CD 2, according to the 2021 ACS.²⁵

66. In addition, I have prepared socioeconomic contrast charts by race and ethnicity for all counties, municipalities, and unincorporated places with populations greater than 2,500 (and 10% or more SR Black), available via the link:

http://www.fairdata2000.com/ACS_2015_19/Mississippi/²⁶

67. The 5-year 2015-2019 ACS charts make clear that the statewide and CD 2-level socioeconomic disparities by race also exist at the county and municipal levels throughout Mississippi.

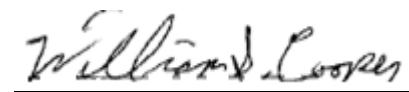
²⁵ Socioeconomic statistics for the 2022 Congressional Plan will not be available until the 1-year 2022 ACS is published in September 2023.

²⁶ These charts are from the 5-year 2015-2019 ACS. The 5-year ACS estimates are based on single-race Black (including Hispanic Black). Any Part Black estimates are not available in the 5-year ACS. The charts and data tables I have prepared also report corresponding estimates for the Latino and NH White population.

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I reserve the right to amend or supplement my report in light of additional facts, testimony and/or materials that may come to light. Pursuant to 28 U.S.C. 1746, I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct according to the best of my knowledge, information, and belief.

Executed on October 3, 2022.


William S. Cooper
WILLIAM S. COOPER